

Testimony by Congressman G. K. Butterfield (NC-01)
Chairman, Congressional Black Caucus
Make It In America Hearing
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Mr. Hoyer, for the last five years you have united us around a critical agenda focused on “Making It in America” so that cities and towns across this country could not only build products, but build an economy that benefits us all. President Obama has already signed 16 “Make it in America” bills into law and we continue to develop advanced manufacturing technology that has served as the impetus for a manufacturing renaissance in the United States.

Since joining the Energy and Commerce Committee in 2007, I have been a strong advocate for growing the innovation economy. From immigration to cyber security, privacy to patent reform, Congress, the Administration, and the private sector must be equal partners in developing policies that keep pace with emerging technology, not stifle it. The forty-six members of the Congressional Black Caucus (CBC), collectively representing more than 30 million Americans, are acutely aware of the unique challenges and the promising opportunities that come with creating jobs of the future.

But, America has yet to unlock the full potential of innovation because of the lack of African American representation in the Internet economy. The gross underrepresentation of African Americans on corporate boards, in the tech workforce, in contracting with these companies, and at venture capital firms is alarming.

While African Americans make up just six percent of the STEM-related workforce, they are prolific users of technology. A Pew Research Center report shows that African Americans use the Internet and social media as often as their white counterparts and in some cases, even more frequently. But African Americans’ embrace of technology and social media has not translated into technology jobs or seats on boards of directors.

For example, African Americans make up only two percent of the total workforce at social media giants Facebook and Twitter. While some progress has been made, much more needs to be done. Additionally, neither company has an African American serving on its board. These companies are certainly not alone in their need to increase African American representation at all levels of their business. According to a recent Rainbow PUSH Coalition survey of 20 tech companies, African Americans hold just three out of 189 seats on major tech company boards of directors. America can do better.

That’s why the Congressional Black Caucus launched CBC TECH 2020 to bring together the best minds in the tech, non-profit, education, and public sectors to achieve full representation of African Americans at every level of the technology industry by 2020.

First, we must make targeted investments in STEM education starting in middle school. According to the Level Playing Field Institute, there will be an estimated 1.4 million new tech jobs by 2020. Seventy percent of those jobs will remain unfilled at the current rate U.S. universities are producing qualified graduates for these roles.

The solution cannot be to simply look abroad for people to fill these roles. America must develop “home grown” talent – men and women from rural and urban America – those from well represented and underrepresented communities – to power the innovation economy. We must also ensure that our Historically

Black Colleges and Universities have the resources necessary to prepare our students to be competitive in the tech economy.

Second, we must see greater transparency from tech companies, particularly those who have not released their diversity data. This is the first step toward improving the diversity of the industry.

Finally, we invite organizations to work with us to produce a TECH 2020 African American Inclusion Plan. Each company would draft a plan that fits its unique circumstances in the marketplace and would set goals, commit resources, and outline action items to increase African American inclusion. We want to work in partnership with you to produce substantive and attainable goals.

Colleagues, we know that the best days of American innovation are ahead, but we can only truly be successful if we put all of our best minds to work.

Thank you.

Written Testimony of Representative Jared Polis (CO-2)
Make It in America: What's Next?
PANEL 1: American Innovation

Sharing Economy. Collaboration is the foundation of our economy, and 21st century technology presents more opportunities than ever before for people to exchange information, resources, and capital at the blink of an eye.

Start-ups are no longer just about a small group of people huddling together to pool their ideas and resources. They're about crowdsourcing ideas and investment opportunities. They're about developing source code collaboratively and taking advantage of open source technology, and about protecting the resources that all businesses and economies depend on to grow – whether they're natural resources like air and water or technological resource like the Internet and wireless spectrum.

That means public policy has to catch up to the needs of 21st-century innovators. We should be promoting collaboration and looking to eliminate barriers to entry – so that folks with good ideas can market them to potential investors who can help implement them, and start-ups can compete with name-brand corporations that far too often still monopolize the marketplace.

Immigration. One of our biggest challenges in growing new businesses is that our broken immigration system does not allow for training and retaining the talented workers and entrepreneurs that want to be a part of our country's economy.

Comprehensive immigration reform is one of the first steps Congress should take if it is serious about embracing startups and the positive impact and job growth they contribute to our economy.

Reform must provide a pathway for high-skilled workers and entrepreneurs to compete in the American economy. Failing to act on immigration reform is nothing short of saying that we are willing to ship jobs overseas.

Internet. Promoting start-up growth in the 21st century means we have to preserve the free and open internet.

The Internet is under attack on a variety of fronts – from some of our colleagues in Congress who are trying to prevent the FCC from implementing rules designed to keep the Internet fast and open, and from corporate lobbyists who want to censor and remove controversial online content under the guise of copyright enforcement.

One of my top priorities is stopping legislative efforts like SOPA and PIPA that introduce government censorship into our online marketplace – where free expression is absolutely essential to the role it plays in worldwide commerce – are incredibly destructive to the global economy.

Surveillance. The innovation economy has also been damaged by our government's overzealous surveillance apparatus. The revelations about the NSA's data collection programs drove consumers around the world to store data with foreign companies instead of companies that operate domestically. Furthermore,

the backdoor searches that NSA officials use to gather information have also undermined the security of the Internet by weakening the encryption protocols that it depends on.

Investment in Growth. If you want new business to grow and thrive, they need an “ecosystem” with the essential elements.

Like a growing tree needs sun, water, and good soil, growing businesses need Congress to make investments in infrastructure, R&D, and our future STEM leaders.

This means a long-term highway bill, serious investments in basic science and research, and education policies that prepare students to be competitive in the global economy.

Access to capital. Access to capital is one of the largest challenges a startup can face. In the modern economy, where startups can rise and fall in the blink of an eye, the traditional banking system does not always meet the capital demands of startup firms.

Moving forward, we must continue to look for creative ways to make sustainable and usable capital accessible entrepreneurs, while also balance protections for investors.

Labor. Finally, part of growing the economy is having strong organizations that can fight on behalf of the working people. We must expand collective bargaining in order to decrease wage disparity and improve opportunities for all. The middle class’ share of income closely mirrors the decline of union membership. Thousands of studies show there is a high correlation between union membership and middle class income. We must think outside-of-the-box to reverse this trend for all working Americans.

Conclusion. Congress’s job is to do everything possible to foster an environment where Americans can innovate and create. That means writing labor policies that allow all Americans to climb the career ladder and provide for their families. And it means marshaling all the resources available to us – our environment, our workforce, our free and open Internet – to compete in the global economy.

Written Testimony of Representative Bill Foster (IL-11)
Make It in America: What's Next?
PANEL 1: American Innovation

Thank you, Mr. Hoyer, for convening these panels and for the opportunity to testify today. Highlighting the need to “Make it in America” is very important to the success and welfare of America’s middle class.

Before having the privilege to represent the Eleventh Congressional District of Illinois, I was a businessman and a scientist. When I was 19 years old, my brother and I founded a company manufacturing microprocessor-based lighting control consoles. This company now manufactures over half of the theater lighting equipment in the United States. My brother is still the Chief Executive Officer and the company has maintained its manufacturing facilities in the Midwest, supporting hundreds of good-paying jobs.

Growing the pie means the creation of new things, the demand for new capital, and the jobs to meet these needs. But not all invention and innovation happens in large, highly-funded laboratories or research and development facilities. The business my brother and I founded began its life in my parents’ basement with a \$500 investment. I, like many other inventors of my generation, started out by taking apart lawnmowers, radios, televisions and putting them back together.

However, today children are not able to take apart a smartphone and intuitively figure out how it works because so much of the engineering is in the software. We need new ways to foster that interest in learning *how* things work and how to build them better. Doing so will serve as a way to get kids interested in the STEM fields and lay the foundation for a bright future.

To accomplish this, I introduced H.R. 1622, the National Fab Lab Network Act. A fab lab is a set of digitally controlled machine tools that enable you to build just about anything. These are the tools of modern manufacturing: 3D printers, laser cutters, routers, and computer-aided design tools. They can be used to build anything: a bracelet, machine part, or even a fully functioning computer.

My bill would create a federal charter for a non-profit organization called the National Fab Lab Network. A national network of fab labs would give children access to the tools and guidance they need to build things. For a child, turning something they imagine into something they can hold in their hands is a powerful experience. It changes the way they think of themselves. “I make things,” becomes part of their identity.

For our nation to prosper and for our economy to grow, America needs makers. Fab labs would also help our nation’s existing makers by enabling them to rapidly prototype their idea. Small businesses start with an idea; fab labs give entrepreneurs the tools they need to turn their ideas into realities. Too often, this is the stage would-be businessmen and inventors can’t get past. Fab Labs democratize and spread the means to innovate and produce real world products—designed, created, and produced right here in the United States.

From the local to the national scale, invention and innovation drive economic growth. The Congress is positioned to provide the investment and create the environment to drive and nurture the next great idea. Again, I thank Mr. Hoyer for highlighting the need and the opportunity we have to advance American manufacturing.

Written Testimony of Representative Suzan DelBene (WA-01)
Make It in America: What's Next?
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As someone who represents a hub of science and technological innovation – and who made a career in the tech industry before coming to Congress – I am no stranger to the importance of a thriving “innovation economy.” But today, I would like to urge my colleagues to think bigger, and more broadly about what that really means. When we talk about building a strong manufacturing sector in the US, technology must be part of the conversation.

The United States has been at the forefront of groundbreaking technological advances. We can maintain that leadership, but we need to make sure that our infrastructure and workforce are equipped for an increasingly technology-dependent world.

The line between “technology” and “non-technology” or what we refer to as software and hardware sectors is diminishing as the demand for software-driven and Internet-connected products grows at lightning speed. We are entering a new era of connected devices called the Internet of Things that holds transformative promise for our economy and the way we live, work, and play. Our homes, cities, and even our wrists [hold up Band] will be connected in unprecedented ways. And this means that the people designing these products will need to understand how to produce technologically complex products that interact with other products. And it also means that we will need to understand how to handle and protect the communications and vast amounts of data that will come from these products.

Traditionally, technology has been thought of as a nice-to-have, but it is increasingly a must-have—a basic part of an organization’s infrastructure. Investing in that infrastructure is not only a smart thing to do that will yield great returns, it’s critical to maintaining security and protecting privacy and intellectual property. And it isn’t just internal to an organization, from laying fiber to make sure every community in America has meaningful web access, to securing government and private sector networks, and equipping our cities and towns with life- and money-saving technologies, investments in our technological infrastructure help build the foundation for a strong economy.

At the same time we need to train our students and workers for 21st century careers. That means developing a plan to ensure that our workers have the tools they need to drive the next generation of innovation in this country. We should be including computer programming, or coding, into every school curriculum. We need to encourage creativity and invention emphasizing not just STEM education, but STEAM: Science, Technology, Education, Arts and Mathematics. And we need to support those already in the workforce to pick up skills that will allow them to adapt to rapid changes in technology.

If we want to continue to “Make it in America,” we must support innovation, invest in a 21st century technology infrastructure and educate our workforce for the jobs of tomorrow.

Written Testimony of Representative Mark Takano (CA-41)
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As we all know, the last few decades have seen a steep decrease in domestic manufacturing. Analysts became resigned to the idea that labor costs in Asia and Mexico would never allow us to be competitive, and that we needed to shift the fundamentals of our economy to reflect this. We shut down factories, focused on the creation of vast supply networks, and began retraining our students to look for jobs outside of factories.

However, some of the fundamentals of manufacturing are changing, and with this change we have an opportunity. The changes are being driven by advancements in technology, increased access to new forms of capital, an easier transition from idea to prototype, changes in consumer purchasing patterns and a direct line to sell to those consumers through the internet.

An example I'll share is of Anton Willis, an avid kayaker who after moving in to a San Francisco apartment had no place to keep his kayak. He brainstormed a solution. To build a folding kayak out of corrugated plastic that would fit in his closet.

That idea has become a successful business known as Oru Kayaks, which are designed and manufactured in California. Their website boasts: "We're proud to be part of a new wave of American manufacturing—focused on quality, flexibility and continuous innovation. We believe in American workers, American suppliers, and American quality."

Along the way from idea to business he used a variety of new tools now available to the American innovator. The first step required him to create a prototype, and since his apartment wasn't large enough to hold a kayak, it also wasn't large enough to hold the tools he needed to create one of the 20 full-scale prototypes he initially put together.

However, Anton was a member of a Makerspace in San Francisco.

While we associate garage workshops with early inventors—like the home computing clubs that led to the PC revolution—this new generation of innovators have set up shops in large warehouses, or "Makerspaces," that operate on a gym membership type business model. For an average of \$100 a month, members receive access to millions of dollars' worth of advanced manufacturing equipment. Once members are trained, they can use that equipment for any type of project they want to pursue.

Anton's team worked on dozens of small paper prototypes before they began the process of fabricating their full size prototype. They worked with a number of traditional shop tools for fabricating in metal and plastic, and then they added in more advanced tools and Computer Numerical Control machines, also known as CNC. Thankfully, the cost of these machines, and the technical knowledge needed to use them have dropped in the last few years.

Once he had a solid prototype, he needed to scale up production to take it to market, which meant he needed capital. He used the popular crowdsourcing website Kickstarter to raise money from future customers, rather than having to pitch his idea to investors that might not see his vision, or have shared his experience as a

kayaker looking for a solution to a common problem. His goal was \$80,000, but he quickly blew past that and raised \$443,000.

This is the story of one business. But this is happening across the county.

Consumers are demanding higher quality goods that provide a more personal experience, and Artisans, Makers and Small-Scale producers are better equipped to handle that demand than our international competitors.

They're better equipped to locate demand in their community or online, they're able to learn the skills and access the tools needed to prototype their ideas at Makerspaces, they can raise money through crowdsourcing, and they can take their products to market through sites like Ebay and Etsy.

But a gap still remains. That gap is how to scale up production thoughtfully and sustainably, without moving their production operations overseas.

And here lies the great opportunity. Manufacturing is not as dirty, loud or dangerous as it was a generation ago. And "Small-Batch Manufacturing" can actually act as an anchor in the redevelopment of a neighborhood; in the same way that bringing in retail has been for decades.

These are small businesses that are locally owned and produce tangible goods for other businesses or for consumers. What they need, and often don't have is the proper space to set up shop. Their operations are generally much smaller than traditional factories, often less than 2000 square feet, and they can run in to zoning and technical problems with buildings not intended to be used in this way.

Manufacturing in residential areas has a series of added benefits. Your employees can live nearby and it's easy to add a retail component to your location. By adding in tours, events and workshops you are strengthening your brand, attracting a local audience to your product and turning your neighborhood in to a destination.

As legislators we can visit and support our local Makerspaces, we can push to make crowdsourcing rules simpler, while ensuring strong oversight and consumer protections and we can incentivize local zoning and development of small batch manufacturing as part of redevelopment plans.

If we as policy makers can come together and be supportive, this may be the catalyst that brings manufacturing back to America.

Written Testimony of Representative Brian Higgins (NY-26)
Make It in America: What's Next?
PANEL 2: Skills Training for the Future

I thank the chair, and I thank Mr. Hoyer for calling this important hearing today.

Over the last five years our country has slowly recovered from the worst economic recession since the Great Depression. At long last, American families are beginning to feel a return to normalcy.

Since Congress stepped in to help General Motors and Chrysler through bankruptcy in 2009, the auto industry has added 600,000 jobs, including the creation and retention of 700 jobs at the GM engine plant in Tonawanda, NY. And the larger economy has added private-sector jobs for 63 months in a row, the longest streak on record. Over the past five years we've added 12.6 million jobs, nearly 900,000 of which have been in the manufacturing sector. We are seeing the largest resurgence in domestic manufacturing in decades, as rising costs overseas encourage U.S. companies to move factory production back home.

Although the economy is in far better shape than it was in 2009, we still have a long way to go. There are steps the government can and should take to promote job growth, especially in the manufacturing sector. I'd like to respectfully offer my thoughts on how the "Make it in America" agenda, under the leadership of Mr. Hoyer and House Democrats, can expand our economy.

And I'd like to draw on the experience of Buffalo and Western New York. For decades we suffered from a weak and vulnerable economy. But today you see construction cranes in downtown Buffalo again. Jobs are being created and Buffalo is regaining the confidence it once had.

The most obvious lesson of Buffalo's resurgence is the transformative power of infrastructure investment.

Ten years ago my community won a \$279 million federal relicensing settlement from the New York Power Authority. We dedicated that funding to infrastructure, and it is currently financing the transformation of Buffalo's waterfront from an unused mess to a magnet for hundreds of millions of dollars of private investment.

Our example of the economic power of infrastructure could not be clearer. But Washington is not paying attention.

Congress has authorized just \$50 billion a year for our roads and transit. And despite the common misconception, only 8% -- or \$64 billion -- of the 2009 economic stimulus bill went to infrastructure. Yet we've spent over \$150 billion rebuilding infrastructure in Iraq and Afghanistan -- and for what? It is time we do some nation building here at home.

Salaries in the construction trades average \$70,000 a year, and the jobs can't be outsourced. I suggest the Make It in America agenda should encourage Congress to enact a much more robust infrastructure bill this year than the timid approach currently under consideration.

A second lesson we've learned in Western New York is that investments in the environment and energy can lead to the creation of manufacturing jobs.

Along the Buffalo River is the Republic Steel plant. It was one of the largest employers in the region until it closed in 1984. The site sat abandoned for decades. But in recent years our community cleaned up the site using the Brownfields program. We converted it into the Riverbend Commerce Park -- 200 acres of mixed use economic and recreation land on the Buffalo waterfront dedicated serving as a “green business hub”.

Last year SolarCity, America’s largest solar energy supplier, decided to locate its advanced solar manufacturing plant at Riverbend. The factory, which is under construction, will be the largest solar panel manufacturing plant in the Western Hemisphere and will produce 1 gigawatt of annual solar capacity. It will create 3,500 new jobs in Western New York between the plant and local suppliers.

What had been a depressing reminder of former glory now inspires confidence. Buffalo’s old and industrial image has been transformed to one that is new, exciting and welcoming economic development. But without federal policies that recognize the benefits of alternative energy, the skyrocketing use of solar energy will be limited. And unless we support environmental cleanup programs, fewer communities will be able to transform their abandoned factories into new manufacturing hubs. Therefore I suggest that the Make It in America agenda educate Congress about the opportunity we have to make America a manufacturing hub for the energy technologies of the future.

A third component of the Make It in America agenda should be job training. Employment in the domestic solar industry will grow by 20% this year. In Western New York, Erie Community College (ECC) has seized the opportunity to develop a clean energy curriculum program to meet growing employment needs. Students at ECC learn how to size and install solar energy systems, connect electricity to the grid, and interpret and comply with the local building codes.

Just as manufacturing businesses compete with companies on every continent, their employees compete with workers all over the world. In this new global environment it is essential that American workers develop the skills to keep them ahead of the competition. And because technologies change and industries adapt, our workers need sustained continuing education over the course of their careers to keep their edge.

One area in particular we should examine is the education afforded to our veterans. The GI bill provides the opportunity for veterans to obtain college, technical or vocational education. But there are deadlines by which they must use these benefits, limitations that do not reflect the realities of our modern economy. After leaving the service, many veterans postpone further education to join the workforce and support their families, or are faced with lengthy rehabilitations from service-related injuries.

GI bill benefits should not come with an expiration date. We should instead provide our veterans greater flexibility in accessing their earned educational benefits. America’s military personnel have placed their lives on the line for our freedom and we must ensure that our nation’s veterans receive the benefits they earned serving our nation. I have introduced legislation, the Veterans Education Flexibility Act, that will allow our veterans to get the education and job training they have earned, at a pace that makes sense for a 21st Century workforce.

Infrastructure, alternative energy, and job training. By taking chances in these areas Western New York is on the right track once again. It is my hope that the Make It in America agenda will help Congress reverse course and embrace smart investments in these areas that are catalysts for job creation in American manufacturing.

Written Testimony of Representative Tim Walz (MN-1)
Make It in America: What's Next?
PANEL 2: Skills Training for the Future

Intro:

We've come a long ways since the days of the great recession, and we're proving we can make things in America again.

While our economy is booming, I'm here today to discuss some of the issues that are facing my district that could slow down progress if they're not addressed—workforce development and affordable housing.

Workforce development:

Minnesota's 1st Congressional District is ahead of the curve. We actually have too many jobs. So many, that we can't fill them all in some places.

While this is certainly a good problem to have, it is indeed a problem that we need to find solutions to. My district has over 100 diverse manufactures.

From Fastenal in Winona, to AGOC in Worthington, to Angies Kettle Corn in Mankato, the state of Minnesota can "make it."

That isn't the problem.

The problem is workforce development. By the year 2025, it is projected that there will be two million vacant manufacturing jobs in this country, and we need to ensure we have the skilled, trained workforce necessary to fill these positions.

Lots of folks don't know this, but it is just as cheap to make goods here in the US as it is in China. For every dollar it costs to make something here at home, it's 96 cents in China, and this doesn't factor in transportation costs or intellectual property rights which would put the US on top.

Outsourcing today is but a symptom of the underlying problem. We do not have the labor force at the ready to fill these highly skilled positions.

We need start rethinking asking our students to only consider 4 year degrees.

We need welders, electricians, and mechanics—all noble, honorable professions.

Many high schools are cutting shop class—this is a mistake; let's ask that shop, wood crafting, mechanic and other vocational classes be added back in as high school electives.

These types of jobs can provide them with a middle class wage, benefits, stock options, and more.

Additionally, we need to work with our veterans to certify them and connect them with employers. There's no reason why a soldier who has served in Iraq as a driver needs to go through an arduous certification process to become a driver of an 18-wheeler. It just makes sense, and I'm glad to see a bevy of bills out there which address this problem. Now, we just have to get many of them moving in Congress.

I believe strongly that we must find innovative ways to encourage our next generation to build careers in these fields and be ready to fill these vacancies when they are open.

Affordable Housing:

With an increased workforce, comes with an increased need for affordable housing.

When I talk about affordable housing, I mean housing for the working a middle class.

Housing costs are the single biggest expenditure in family budgets.

Even though the housing market has returned, Congress has failed in renewing and funding programs that help insure these types of houses are being built.

Some communities in my district have less than 1% vacancy rates in the workforce housing stock. This lack of housing is eating up family's budgets that could be spent in the community spurring economic growth.

Instead, they're falling behind in pursuing the American Dream.

Workforce Development and Workforce Housing need to go hand in hand order to keep our country moving forward.

Conclusion:

America is making things again and we've proven the way forward is to invest in middle out, not the top down. Minnesota is a prime example of that. We have too many jobs.

The only way we will slow down is if fail to develop the workforce necessary to fill these positions and we fail to provide affordable housing in these local communities.

Let's work together to find solutions to these problems and keep our country moving forward.

Written Testimony of Representative Jim Himes (CT-04)
Make It in America: What's Next?
PANEL 2: Skills Training for the Future

Thank you for the opportunity to testify today. The global economy is rapidly changing and American workers and business must adapt to face this changing landscape. It is my sincere belief that, given the proper training and resources, American workers can out-build and out-compete the rest of the world. It's partially the job of the federal government to implement policies that can help workers and companies fulfill this promise.

Continued American success in the future is going to result from pursuing policies that are forward looking, not policies that try to return us to the economy of fifty years ago. The dual trends of globalization and increasing technology have changed the way that the American factory floor looks, and has increased the level of skill necessary for many manufacturing jobs.

I recently had the opportunity to tour the mile-plus-long assembly line of a BMW factory, and I was struck by the hundreds of robots I saw, each with an assigned job, piecing the cars together. During that same time, I saw fewer than a dozen people, most of them occupied with ensuring that the robots were working smoothly.

This tour should raise the eyebrows of anyone concerned with America's place in the global economy for two reasons. First, according to the Brookings Institute, Germany uses 3 times as many industrial robots per hour worked as the United States. This allows plants to run longer and more efficiently and puts us at serious competitive disadvantage. Second, this automation has changed the balance of jobs at BMW. Instead of row upon row of welders, there are offices full of programmers. The jobs are still there, they just require drastically different skills in the 21st Century than they did in the 20th.

Thankfully, the solution to this problem is right in front of us. We need to dedicate the necessary resources to train new workers, and retrain current workers, with the skills they need to succeed in the new economy. This starts in elementary education and high school with an increased emphasis on the STEM knowledge that today's jobs require, and continues in higher education. Not just in traditional, four-year colleges, but in community colleges and trade schools as well.

Housatonic Community College, in my district, is an institution preparing its students for the 21st Century workforce. It is one of only four facilities for training in advanced manufacturing in the state, and 96% of the graduates of its manufacturing program this spring found jobs. Housatonic is also training students in jobs that are non-exportable, such as computer information technology and health care workers, including a new medical assistant program, where jobs usually start at around \$50,000 a year.

And these skilled workers are desperately needed. A few years ago, I visited James Ippolito & Co, a precision manufacturer in Bridgeport, CT, to talk about the challenges and opportunities they were facing. At James Ippolito, the problem wasn't too few jobs, but that there were not enough skilled workers to fill the available

positions. How can companies be expected to grow and drive our economy if they don't have the properly trained employees to do so? That's why education and job training are so vital.

The path forward is clear. We cannot undo technological advances, or refuse to participate in the global marketplace. Instead, we must help prepare our workers by providing education and new skills to provide security for American families.

Written Testimony of Representative Suzanne Bonamici (OR-01)
Make It in America: What's Next?
PANEL 2: Skills Training for the Future

Thank you, Congressman Hoyer and colleagues, for inviting me to testify about skills training programs and the role they play in strengthening America's economy.

The need to close the skills gap is clear. For example, the owner of a marine pipe-fitting manufacturer in Hillsboro, Oregon, has had trouble recruiting qualified employees. Because his company's products contain unique alloys, some of his employees must train on the job for a year or more. In part because of the challenge of identifying workers with requisite skills in welding, this company is pursuing a new internship program with a local high school.

And in rural Yamhill County, Oregon, a polymer and composite manufacturer was having trouble finding people to fill positions, so they worked with other businesses and started a manufacturing class in the local high school. These examples show that there is a growing problem. A recent study titled "The Skills Gap in U.S. Manufacturing: 2015 and Beyond" found that manufacturing executives remain deeply concerned about the skills gap. More than 80 percent of executives who participated in the study said the skills gap would eventually prevent their companies from satisfying customer demand. Overall, the study predicted that roughly 2 million manufacturing jobs will go unfilled during the next decade because of the skills gap.¹

So what can federal policymakers do to help close this gap? An important starting place is to consider what skills our economy will require in the future.

A few years ago, IBM conducted a major survey of CEOs worldwide to ask what they viewed as the most important skill for their companies' success. The CEOs said that creativity was more valuable than any other skillset.² This finding is not surprising. Innovation—a byproduct of creative thinkers—has always been a key ingredient to our country's economic success. As we discuss the future of American manufacturing, it's important to remember our history: Ours is a country that doesn't just make things, we create them.

Our legacy of innovation is visible in today's companies and products. Apple is an example of how companies benefit from blending superior engineering with creative design. During the company's development of the iPod, for example, Steve Jobs was said to have rejected early prototypes that worked well because they were too large. As the story goes, after Apple engineers insisted the device could not be made smaller, Jobs carried the device to a fish tank and dropped it in. After a moment, several air bubbles emerged, exposing empty space inside the device, and Jobs pointed out to the engineers the iPod could, in fact, be made smaller. The ubiquity of Apple products is linked to the company's obsession with design and the fusion of technology with artistry.³

¹ <http://www.themanufacturinginstitute.org/~media/827DBC76533942679A15EF7067A704CD.ashx>

² http://www.businessweek.com/innovate/content/may2010/id20100517_190221.htm

³ <http://www.businessinsider.com/steve-jobs-threw-ipod-prototype-into-an-aquarium-to-prove-a-point-2014-11>

Skills training should prepare workers for this kind of innovation. Of course there is more than one model for preparing an innovative workforce, but as the co-chair of the Congressional STEAM Caucus, I have a particular interest in the ability of STEAM education—STEM that incorporates arts and design broadly defined—to prepare workers who have advanced technical skills as well as an aptitude for problem solving and creative thinking.

Across the country, schools are integrating the arts and creative learning opportunities into traditional STEM subjects. This does not dilute learning or minimize the importance of science, technology, engineering and math—it enhances STEM by challenging both halves of students’ brains. Combining arts and design with computer engineering, for example, is more representative of the kinds of cross-disciplinary collaboration that is so critical in workplaces in the real world.

Another benefit of STEAM education is that it can help attract underrepresented groups to STEM fields. Although women make up roughly half of the workforce, they hold only about one-quarter of STEM-related jobs.⁴ And only about 12 percent of engineers are Latino or African-American, even though these groups account for a much larger share of the overall workforce.⁵

There’s a lot we need to do to encourage people from underrepresented groups to enter STEM fields. We need more diverse role models in classrooms and boardrooms. We need higher education institutions and industry groups to target resources and experiential learning opportunities to low-income and minority students. But STEAM education can play a part in the effort to change the perception of STEM fields and make them more inclusive of diverse skills and approaches to problem solving.

Companies don’t want a workforce of static manufacturers; they need dynamic thinkers and diverse perspectives. In short, we need workers who can learn quickly and adapt along with their companies. Employers understand this. One survey found that more than 80 percent of business leaders prefer employees who can continuously learn skills, even if these employees do not possess an in-demand skill when they’re hired.⁶

Our primary focus should be fostering a diverse workforce that knows how to innovate. And these two objectives go hand-in-hand. In a Forbes survey of hundreds of global companies, the vast majority cited diversity as an essential component to their ability to innovate.⁷

None of this is to suggest education programs should not teach specific skills. Indeed, secondary and postsecondary career and technical education programs should be informed by the needs of industries, should include “stackable” CTE credits, and should lead to a recognized credential or degree.

The needs of companies evolve rapidly, so Congress should reauthorize the Carl D. Perkins Career and Technical Education Act with a goal of having CTE programs keep pace with corresponding careers. One barrier is equipment. A recent survey of CTE instructors found that 80 percent would use additional federal funding for new classroom equipment.⁸ We should no longer expect schools to spend considerable resources on

⁴ <http://www.esa.doc.gov/sites/default/files/womeninstemagaptoinnovation8311.pdf>

⁵ <http://www.usnews.com/news/stem-solutions/articles/2015/02/24/stem-workforce-no-more-diverse-than-14-years-ago>

⁶ <http://www.fastcompany.com/3028811/in-defense-of-a-liberal-arts-degree>

⁷ http://www.huffingtonpost.ca/2011/07/29/workplace-diversity-innovation_n_913214.html

⁸ https://www.acteonline.org/uploadedFiles/Assets_and_Documents/Global/files/CTE_Info/Research/ACTE%20Report%202013_Print%20Version_HighRes-Final.pdf

equipment when it often loses relevance quickly. Instead, we should identify opportunities to support public-private partnerships that can help equip classrooms with the most up-to-date tools.

In addition to helping classrooms get modern equipment, reauthorization of a new CTE law should prepare instructors to provide curriculum that is relevant to employers. This means the Perkins CTE Act should continue to promote quality professional development and support frequent opportunities for teacher training, including through opportunities provided by companies and industry groups.

Of course, some of the most effective examples of industries partnering on career and technical education are programs in which companies become active participants in students' education. In Oregon, a number of universities have partnered with leading companies—like Boeing, Intel, Genentech, and Georgia Pacific—to develop the Multiple Engineering Cooperative Program, which was established in 1978.⁹ The program places engineering students in credit-bearing internships, and the universities and companies share responsibility for preparing students for the workforce. All parties continuously evaluate the program and share recommendations for improving students' learning.

As Congress continues to support the development of a diverse and innovative workforce through quality secondary and postsecondary programs, we should remember that, ultimately, skills training programs rely on adaptability—just like the economy they support.

Thank you for the opportunity to testify today. I am happy to answer questions.

⁹ <https://www.mecopinc.org/>

July 9, 2015

Written Testimony of Representative Donald Norcross (NJ-1)

Make It in America: What's Next?

PANEL 2: Skills Training for the Future

Thank you Whip Hoyer and I want to thank my colleagues, all of whom have given excellent and informative testimony about the challenges facing hardworking Americans. I'd like to use my time to share with you a few stories that I believe illustrate the importance of investing in education at all levels and for all students, regardless of their dreams and goals.

For most of my life before I came to Congress, I was an IBEW electrician installing power lines, wiring refineries and chemical plants. Before they sent me into the field I went through extensive training and was given my first set of tools. The lesson I learned was that if I had the right tools and the right training, I could succeed and grow on the job. If I didn't, I was in for a shock and I mean that literally.

Looking back over my career, one thing is clear: life will always bring twists and turns. Sometimes when you least expect it. But what has become equally clear to me in my time as an elected leader is this: if we give Americans access to the tools and training they need to succeed, they can make it in America, no matter what life throws their way.

My journey started in Pennsauken, New Jersey. One of four boys, I was raised in a typical middle class household – dad worked in a blue collar profession, mom stayed at home. After graduating from Pennsauken High School, my brothers and friends set off on their own paths – they were all relatively certain of what they were going to do with their lives. Like many young Americans today, my future was dead set on being uncertain.

I was interested in law enforcement, so I took a summer job patrolling the Atlantic City boardwalk as a Class II Officer. With a budding interest in Criminal Justice, I reached for the first tool in my belt: pursuing an associate's degree at Camden County Community College. For someone who was still not completely certain what he wanted to do in life, Camden County offered a quality education that was affordable. The key words here: quality and affordable.

The ability to attend classes part time – during nights and weekends – while working part-time jobs to make ends meet made Camden County Community College a perfect fit. Perhaps more importantly, the College made sure that my uncertainty didn't weigh me down or hold me back from exploring all the possibilities.

In the New Jersey Legislature I supported the "NJ TRANSFER" initiative that created a path from our community colleges to a four year degree from New Jersey state universities. Under the NJ TRANSFER program, students can enroll in their local community college with the opportunity to transfer up to 60 credits towards a bachelor's degree at places like Rutgers and Rowan Universities. This is an excellent example of a policy that would provide flexibility and opportunity to students across America, at little or no cost to the taxpayers.

It's also a tool that I wish I had had in my belt on my journey.

When we look back at life's many twists and turns, there's no denying that luck has a hand in where we end up. We learn that luck comes in two sizes – sometimes it's good and sometimes it's bad. And sometimes we aren't immediately sure how to characterize it. That happened to be the case on my first day of health class at Camden County Community College.

When taking attendance on the first day, the teacher called out the name "Norcross." Naturally I replied "here." There was some hesitation. The teacher sort of smiled the repeated "Norcross."

When I heard "here" from across the room, there it was a familiar and unmistakable voice. My mother. That's right. My mother and I were enrolled in the same class. A health class, nonetheless. As you can imagine, it was awkward at the time. I can also tell you, only one Norcross in that class finished with a 4.0 grade point average. You can guess who.

Looking back of course, this experience served as one of the best lessons of my college years. And for that, having my mom in my class actually ended up being a stroke of good luck. My mother decided later in life to attend Camden County College to learn a new skill and better herself. She went on to graduate and eventually started the Camden County Adult Day Care, where her work had a profound impact on countless families in our community.

Having my mother in that class taught me that no matter you are, where you are in life, how old you are, or where you came from, an education is that one thing that can change the trajectory of one's life. It can open doors that we never imagined possible. And it can inspire and motivate us in ways we never realized. It provides the chance for those who need more flexibility to earn a degree – the ability to personalize the educational experience to meet one's individual needs.

Not everyone in America wants or needs a college degree; but everyone needs a toolkit. Today apprentices make up only 0.2 percent of the U.S. labor force, far less than in Canada (2.2 percent), Britain (2.7 percent), and Australia and Germany (3.7 percent). Apprenticeships and non-traditional learning pathways should be part of Americans' tool kits, too.

The North American Building Trades Unions invest well over \$1 billion annually in apprentice and journey-level training; maintain 1,900 training centers across North America and train two thirds of all registered apprentices in the United States. Think about it this way: if Building Trades training system, which includes both apprentice-level and journeyman-level training, was a K-12 school district, it would be the fourth largest school district in the US, behind only New York, Los Angeles, and Chicago.

Unfortunately, in spite of proposals by both the Administration and colleagues in both chambers to build upon and expand these privately funded initiatives, the federal government apprenticeship programs are funded at a paltry \$40 million. In an age where workforce qualifications are changing by leaps and bounds to reflect the growth in technology and efficiency, its unthinkable that we would deny Americans of all age this opportunity. More importantly withholding this tool from Americans' toolkits dulls our workforce's competitive edge in a global economy.

Even after I graduated, life's twists and turns brought me back to school, again Camden County Community College because of its excellent continuing education program. As I mentioned earlier, I eventually chose a career as an electrician, and took a course in Electrical Engineering at Camden County to refine my trade. Later, I even attended a Saturday morning computer class with my wife Andrea.

The world was changing, taking its own technological twists and turns, as it continues to today in real-time. I used the skills I learned through my training every day as I worked job sites up and down the Delaware River, installing power lines at refineries using some of the most advanced systems the world had to offer.

This is all to say that education never stops, nor should our commitment to it. I want thank my colleagues and Whip Hoyer for offering their time and thoughtful ideas today and look forward to working with you all to put tools in the next generation's toolkits.

Written Testimony of Representative John Garamendi (CA-03)

Make It in America: What's Next?

PANEL 3: The Future of Manufacturing

The U.S. shipbuilding industry and U.S. natural gas market are strategic national assets essential to U.S. national and economic security. It is in the U.S. national interest to utilize the emerging coastwise and export trades for liquefied natural gas (LNG) to provide reliable, long-term markets for U.S. commercial shipbuilding and for U.S. flag operators; to expand and increase the U.S. shipbuilding industrial base; and to use the LNG export trade to strengthen U.S. strategic interests and alliances with LNG trading partners. Congress must look for ways to use American LNG as leverage to bring to our shores new industries, hundreds of thousands of jobs, and national security modernizations befitting a global climate in which trade by sea will be a critical vulnerability for those nations who do not build, own, or operate ships.

Create Good Middle Class Jobs

Tens of thousands of American jobs, both inside shipyards and found throughout the U.S. supply chain, depend on the strength of the maritime industry. There are currently 117 active shipyards in the U.S. spread across 26 states, and another 200 shipyards engaged in repairs or capable of building ships. In 2011, the U.S. private shipbuilding and repair industry directly provided 107,240 jobs, \$7.9 billion in labor income, and \$9.8 billion in gross domestic product to the national economy. Including direct, indirect, and induced impacts, on a nationwide basis, total economic activity associated with the industry reached 402,010 jobs across all 50 states, \$23.9 billion of labor income, and \$36 billion in GDP in 2011. Each job in the private shipbuilding and repair industry supports another 2.7 jobs nationally, including increased revenue for small businesses serving maritime workers and their families. Each dollar of labor income in the shipyard sector leads to another \$2.03 in labor income in other parts of the economy.

The global LNG fleet currently has 394 vessels. 225 LNG vessels are expected to be added to the worldwide fleet by the end of 2020. Up to 50 of those are set to be built in China to deliver gas, including American LNG, to its ports. 125 LNG carriers and storage vessels are currently on order. Over 70 percent have gone to South Korean shipyards like Daewoo Shipbuilding and Marine Engineering and Samsung Heavy Industries. Another 100 ships are expected to be ordered for delivery between 2017 and 2020. Should we set the course now to equip U.S. industry to win future orders, the economic prospects are tremendous.

Maintain Critical National Security Assets

As laid out in section 3502 of Public Law 113-66, maintaining a U.S. shipbuilding base is critical to meeting United States national security requirements, and can be achieved through the construction of vessels for use in transporting potential new energy exports. Shipbuilding is a strategic national industry critical to the growth and flow of our economy, and to our ability to control the safety and security of the global supply chain. It is also essential to the United States Navy, which relies on a select few remaining shipyards for the construction of new ships and the repair and refitting of existing ships. Further decline of the U.S. shipbuilding industrial base will continue to erode competitive bidding among shipyards, thus compromising efforts to reduce the deficit and balance the national budget. It will also result in the further loss of marine engineering expertise, preventing the adoption and utilization of the same cutting edge ship construction technologies used by our foreign competitors.

Other countries have recognized the critical national security implications of a strong shipbuilding industry, and have taken strides to use LNG trade as an opportunity to bolster their technology and capabilities. India has

made a commitment to require one-third of its LNG import vessels to be Indian-built. South Korea also has registered shipbuilding technology as a national core technology to be controlled by the Korean government. China is looking to triple its LNG imports and plans to ship the bulk of its cargoes on its own project-dedicated vessels regardless of foreign-built vessel availability, ensuring greater control over its supply chain. Seeing a growth opportunity in developing the skills and technology to build more sophisticated ships, Chinese shipyards are aiming to take some \$10 billion in orders for new LNG tankers over the rest of the decade as part of a plan to restructure the country's ailing shipbuilding sector and secure China's energy supply chain.

Enhance Public Safety

Despite the importance of the U.S. Merchant Marine, our foreign trade fleet has declined from 1,200 ships in the 1950s to less than 100 today. This threatens another strategic national asset in reducing key personnel. The U.S. Merchant Marine is a highly trained, militarily-useful labor force, and American merchant sailors are the foundation of our marine transportation system. Further attrition of the Merchant Marine threatens American security because our nation relies on this secure source of labor for the movement of supplies and military cargo and personnel. The explosive nature of LNG heightens the need to ensure that the transport of LNG, especially in U.S. ports, is done by U.S. seafarers.

Strengthen the American Maritime and Shipbuilding Industry

Shipments of LNG to serve the U.S. coastwise market are required by law to be carried on American-built, flagged, and crewed tankers, thus creating domestic demand for new ships. U.S. shipyards are already receiving orders to repower vessels to burn LNG, as well as additional orders for new-builds. As international LNG shipments expand, additional ships will be required, creating a long-term book of orders. The export of LNG will slowly ramp up over the next two or three years and will then quickly accelerate over the next decade or more. This allows both time and a stable, long-term market demand, which—if given the correct incentives—could spur the U.S. shipbuilding industry to re-tool its infrastructure and processes to ramp up the production of domestic tankers and ultimately produce vessels for export of this strategic national asset.

What is Needed

The opportunity is ripe to push a program that reinvigorates our domestic maritime industry, advances American manufacturing, creates good shipbuilding and maritime jobs, and reclaims our expertise in a technology we once pioneered. In December of 2014, the President signed into law the *Coast Guard and Maritime Transportation Reauthorization Act*, which contained a provision that requires the Secretary of Transportation to develop a program to promote the use of U.S.-flag vessels in the export of LNG, and to give priority processing of export applications for deepwater terminals that would utilize U.S.-flag vessels. But this incentive is not enough. To best serve U.S. national security and the public interest by ensuring that American shipyards and the U.S. Merchant Marine benefit from the shipping and export of this strategic national asset, Congress should seek:

- 1) A commitment by the exporting LNG companies to use American-built, flagged, and crewed ships.
- 2) The amendment of U.S. law to encourage to the maximum extent possible, and consistent with U.S. trade obligations, that all LNG exports from the U.S. to be carried on American-built, flagged, and crewed ships.
- 3) Adoption of a requirement that all ships transporting LNG entering and leaving U.S. ports be manned by licensed and credentialed American officers and mariners.

Written Testimony of Representative Cheri Bustos (IL-17)
Make It in America: What's Next?
PANEL 3: The Future of Manufacturing

I want to first thank you, Congressman Hoyer, for organizing today's hearing and for leading the way on the "Make it in America" initiative.

And thank you to all my colleagues here today for your commitment to fighting for American workers and manufacturing.

Revitalizing American manufacturing has been my top priority since coming to Congress in 2013.

In my region in Northwest and Central Illinois, we have a strong and deep manufacturing tradition and the potential to be, what I call, a real "Manufacturing Triangle."

Between John Deere in the Quad-Cities, Caterpillar in Peoria, aerospace companies in Rockford, and the dozens of other manufacturers in communities large and small in between, we have a workforce and manufacturing base second to none.

Yet we still struggle with many of the same problems faced by communities across the country:

- A mismatch between the skills that workers have and the skills employers need.
- Entrepreneurs who find it difficult to secure the capital needed to take their ideas to the next level.
- And hard working families playing by the rules who feel the American dream slipping farther from their reach.

In 2013, I joined with the University of Illinois to launch "Partnering for Illinois' Economic Future," and we've been partners in economic development since.

One of our most important successes we had was to bring the new Digital Manufacturing and Design Innovation Institute to Illinois.

I had the opportunity to make a personal pitch to President Obama that his home state of Illinois would be the perfect place for this first-of-its-kind Digital Lab.

Illinois, and our region in particular, are perfectly suited for this investment to drive the renaissance of American manufacturing.

This Digital Lab for manufacturing will help our region, state and country achieve our full economic potential and be home to even more of the good-paying and innovative manufacturing and research jobs of the future.

The Manufacturing Lab's research work will help develop innovative solutions that transform defense and civilian manufacturing and create jobs.

Because many of these jobs will require new and advanced skills, the Digital Lab will also partner with educational institutions, trade organizations, and local economic development organizations on workforce development.

This sort of initiative is only possible with a tremendous amount of collaboration and cooperation.

No one agency, industry or sector can do this work alone.

It's a true Public-Private partnership.

I have long believed collaboration across sectors, whether formal or informal, is one of the keys to building a strong economic future.

That's why I've hosted regional meetings and economic summits in Illinois to bring together stake holders to discuss the challenges and opportunities we have and what we need to do to improve our region's economy and competitiveness.

Because if you want to achieve big things, you have to work together.

It is my hope that we can bring the collaborative approach I've pursued in Illinois to the national level.

I'm currently working to draft legislation that would direct the President to develop a national manufacturing strategy that would identify sectors and emerging technologies in which American manufacturing can grow and be most competitive internationally.

The bill is aimed at spurring job growth, making American manufacturing more competitive, and rebuilding the manufacturing sector—all of which are critical to continuing our nation's economic recovery.

In fact, the United States is one of the only developed nations without a National Manufacturing Strategy.

I hope to incorporate this legislation into the "Make it in America" initiative in the coming months.

By working together we can strengthen American manufacturing, American workers and the American dream.

Written Testimony of Representative Elizabeth Esty (CT-05)
Make It in America: What's Next?
PANEL 3: The Future of Manufacturing

Thank you, Rep. Hoyer, for convening this hearing and inviting us to testify before you today.

Manufacturing is the backbone of our economy.

In order to secure our nation's strong economic future, we must support our manufacturing and innovation ecosystem.

I come from a third-generation manufacturing family, and I have seen firsthand the creativity and passion that goes in to sustaining and growing a manufacturing business.

Most family manufacturers know that quality employees are the foundation for a successful business.

We cannot strengthen manufacturing without a twenty-first century workforce with the skills employers need.

That's why I proudly introduced the Manufacturing Universities Act of 2015.

This bipartisan bill would establish a Manufacturing Universities program at the National Institute of Standards and Technology.

This will help colleges and universities with existing engineering programs sharpen their focus on manufacturing, developing joint projects with local manufacturing firms and supporting student internships with community manufacturers.

By increasing the focus on manufacturing at the collegiate level, we can target students who have already shown an aptitude for—and dedication to—science, technology, engineering, and math, the STEM fields that are critical to modern manufacturing.

But securing our manufacturing future requires more than just preparing our students—we must support our existing businesses who want to keep jobs in the U.S.

Connecticut is home to more than 5,000 manufacturers, and many are small businesses competing to survive in tough economic times.

In January, I introduced the American Jobs Matter Act, a bill to support those businesses in Connecticut and across the country.

The American Jobs Matter Act would require the Department of Defense to consider the effect on American jobs when issuing contracts.

Since 2007, our military has spent more than \$150 billion on manufactured goods produced overseas.

This makes no sense.

We should not spend our taxpayer money funding jobs overseas when we could be supporting jobs right here at home.

America's manufacturing future is bright, but it's our job to sustain and protect it.

Despite deep divisions in Congress, we have the opportunity to pass bipartisan policies that support our small businesses, bolster our highly-trained workforce, and maintain our global leadership in research, innovation, and technological advancement.

Every district in the country has manufacturers making high-quality products, teachers sparking their students' interest in STEM education, and employees who want good-paying jobs so they can provide for their families.

I've always worked to find allies—both Republicans and Democrats—dedicated to creating and growing American jobs.

For example, my Brownfields Redevelopment Tax Incentive Reauthorization Act, is a bipartisan effort to clean up former industrial sites and incentivize private-sector investments.

With almost half a million sites nationwide that need revitalization, cleaning up our brownfields and spurring economic development is not a partisan issue.

By rising above partisan politics, and focusing commonsense, practical policies, our bipartisan efforts can stimulate real economic growth.

Together, we can ensure that America remains the global leader in innovation and discovery for generations to come.

Thank you Rep. Hoyer, our distinguished Whip, for holding this important hearing on the Make It In America agenda, and for allowing me to serve on the panel.

I look forward to any questions you or other members may have.

Written Testimony of Representative Joseph P. Kennedy III (MA-04)
Make It in America: What's Next?
PANEL 3: The Future of Manufacturing

Good afternoon, and thank you all so much for joining us for this important conversation about the future of manufacturing in our country.

To my colleagues Elizabeth, Debbie, John, Cheri and Annie, it is an honor to be a part of this panel with each of you. From New Hampshire and Connecticut to Michigan and Illinois and all the way over to California, I think the makeup of this panel demonstrates how our manufacturing sector is driving economic growth in every single corner of the United States.

And to Congressman Hoyer, you have been a champion for American workers throughout your entire career. Your leadership has helped guide this Caucus and your unwavering commitment to Democratic values only makes us stronger.

With unemployment in our country reaching the lowest levels we've experienced in seven years and the longest streak of private-sector job growth on record, there is no doubt our economy is on a steady path to recovery.

But below the headlines, there is a dangerous undercurrent that cannot be ignored.

Our working and middle-class communities are still struggling to access these recent economic gains. In my district, older industrial cities and towns like Fall River and Taunton are navigating unemployment rates over double the state rate.

These are proud communities that share something in common with hundreds like them across the country – a heritage of work ethic, ingenuity and skill that they have cultivated since the Industrial Revolution, carefully passed from one generation to the next. These are the communities that coined the term 'Made in America'; that made that phrase really mean something.

To leave them behind now wouldn't just turn a cold shoulder to our past – it would undermine our future.

There is no question that new industries are powering today's economy. Where we once had textiles and jewelry and silver, we have health care and clean energy and robotics. But these innovative new sectors still require the most fundamental building block of industry – high quality, innovative, and sustainable goods, made right here on American soil. Whether it's a wind turbine, a prosthetic knee or an air pollution monitor, there is a thriving role for American manufacturing in our increasingly technology-driven world.

The numbers back that up. During that same streak of private-sector job growth I mentioned earlier, we have added nearly a million manufacturing jobs. In Massachusetts, the manufacturing sector employs about a quarter of a million people with wages \$20,000 higher than the state average.

That potential for manufacturing to bridge the gap between communities thriving in our modern economy and those working day and night to catch up is why I was proud to introduce the Revitalize American Manufacturing and Innovation Act last year. This bill would create a network of manufacturing institutes across the country, each dedicated to a modern manufacturing process or challenge.

With institutes up and running in Youngstown, Chicago, Knoxville, Detroit and Raleigh, we know the model is working.

We know that bringing academia, industry and government together under one roof spurs innovation in our manufacturing sector.

And we know that we can and should replicate those institutes in new regions around the country so we can continue to create jobs and train the workers who will fill them.

Through initiatives like Congressman Hoyer's Make it in America and legislation like RAMI, we can transform the abandoned factories and warehouses that dot Main Streets across this country from relics of an industrial past into thriving emblems of an economy that gives every American community a seat at the table.

I'm looking forward to working with my colleagues on this panel and all of Congress to invest in American workers and rebuild the manufacturing sector that has always defined our economy.

Written Testimony of Representative Ann Kuster (NH-2)
Make It in America: What's Next?
PANEL 3: The Future of Manufacturing

I'm thrilled to join you here today to discuss the Make it in America initiative, something I've been working very closely on back in my home state of New Hampshire. Thank you again Mr. Hoyer for giving me the opportunity to speak about this issue here today, which is so important to workers all across New Hampshire and the nation.

Since taking office, my number one priority has been to help our local businesses create more jobs and opportunity for Granite State workers. Manufacturing is such an essential part of that, but it's a piece of the puzzle that often gets lost in the broader discussion.

A recent study conducted by the New England Council shows that many folks do not understand the importance of our country's manufacturing sector. They think it's a dead art, or as noted in the study, a "declining" industry.

Since taking office, I've traveled all across the state of New Hampshire to visit local businesses, and – just as this report found – I've discovered the exact opposite about our state's manufacturers.

Companies across the state are leading the effort - with innovation and ingenuity - to modernize and revitalize our state's manufacturing industry. Most of the old-fashioned, and sometimes dangerous, tools of yesterday have been replaced with innovative new equipment and computerized technology of the future.

And that's the conversation we need to be having all across the country; how can we breathe more life into this already successful, but often misunderstood, industry? How can we modernize the manufacturing sector, so companies can not only make their products here in America, but they *themselves* can "make it in America" – and become American success stories?

For example, precision manufacturing – which custom tailors products to meet the demands of the new economy – has become the hot new tool for manufacturers all across New Hampshire, and these manufacturers are leading the way in the manufacturing industry of the future.

But as New England Council's report found, there are some impediments to the success even of those companies working to modernize.

Almost every time I visit a manufacturing company taking advantage of new technologies, I hear from the owners that far too few workers have the skills needed to enter these 21st century manufacturing jobs.

EDUCATION

And that's why another one of my top priorities in Congress is to increase access to higher education and job training for every Granite Stater.

My home state of New Hampshire ranks #2 in average college debt, which makes higher education cost-prohibitive for many students who would otherwise go on to great careers, particularly in the manufacturing industry.

That's why I'm working to expand programs to help families save for college, and to pass legislation that will help students refinance their loans at a lower rate.

I strongly believe we must not *only* focus on four-year liberal arts degrees, but we must also increase our workforce development and job training programs so New Hampshire students can learn the skills of today's innovation economy.

The New Hampshire Technical Institute (NHTI) in Concord was just named #1 for what's referred to as "value-added" by the Brookings Institute. That means NHTI students are receiving excellent educations and training, and they are meeting and even surpassing expected outcomes once they graduate.

Let's ensure that *every* student across the state can have access to this kind superior education and training. The first bill I ever introduced after taking office would provide a tax break to companies that partner with community colleges, like NHTI, to work together and provide targeted skill training so students can prepare for specific jobs. These are the kinds of programs we need to prepare our students to become the new leaders of our state's manufacturing industry and propel us forward into the future.

INNOVATION

We also need to capitalize on the talent we have here in America, and work together to pool resources and help secure America's position as a top leader in innovation.

When I first took office, I cosponsored the *Revitalize American Manufacturing and Innovation Act*, which would formally authorize funding to create a network of regional manufacturing institutes across the country. By working across the aisle, with Republicans and Democrats, we passed this legislation into law late last year. These institutes combine resources and invest in research and development, close the gap between research and product commercialization, and provide workforce development training. This is exactly the sort of public-private partnership we need more of to support the exciting work being done in advanced manufacturing.

TRANSPORTATION

Beyond education and innovation, our focus is also on transportation. We need to ensure that once we've trained the students, hired the workers, and created the products, our companies can easily ship these products and make a profit.

If we want American companies to lead in the 21st century economy, we must bring our transportation infrastructure out of the 20th century. It seems so simple, but I've heard from far too many business owners whose work has been impeded by our nation's failing and aging network of roads and bridges. Let's make sure our business owners have access to high quality roads, so they can transport their high quality goods.

CONCLUSION

These are some of the steps we need to take to revitalize our country's manufacturing industry and position our local companies as the world's top leaders, innovators, and entrepreneurs.

From harnessing new technology and changing the way we talk and think about manufacturing, to expanding access to education and job training, to building up our transportation infrastructure and fighting for tax breaks for manufacturing companies making their way to the top, I look forward to working with all of you here in Congress to push these initiatives forward.

Together, we can secure America's position as the THE leader in the modern world of manufacturing. And together, we can help our small business owners and manufacturing leaders in New Hampshire and all across the country truly "make it in America." Thank you!

Written Testimony of Representative Debbie Dingell (MI-12)
Make It in America: What's Next?
PANEL 3: The Future of Manufacturing

Mr. Chairman and my distinguished colleagues, thank you for inviting me here to discuss the Future of Manufacturing. This issue is critical not only to the men and women of Southeast Michigan, which my district represents, but also to people across the country.

Manufacturing is the backbone of the nation's economy. As Henry Ford recognized in offering the revolutionary \$5 workday, manufacturing jobs have been a pathway to the middle class for millions of families for decades.

Nearly one hundred years later, manufacturing jobs continue to provide hardworking families a chance to get ahead. But, we have challenges to overcome in providing that opportunity to everyone. Failed trade agreements cost our nation more than 5 million jobs over the last two decades – most in the manufacturing sector. Things are beginning to turn around in Michigan and across the country, thanks to good public policy, new technologies, and our always quality workforce. Domestic auto sales are reaching their highest levels in years, and American vehicles are again gaining in market share.

To continue to grow our manufacturing sector, we must do more.

One successful program has been the creation of the National Network for Manufacturing Innovation to bring together companies, workers, and cutting edge researchers. In Michigan, we're lucky to have the Lightweight Innovations for Tomorrow Institute (LITE), which opened six months ago as a partnership between the Navy and nearly 50 other government, academic, and private sector entities. The institute is beginning to study difficult 21st Century questions, like the challenges of joining dissimilar metals and manufacturing thinner, stronger lightweight parts.

This is just the beginning. We must come together, as President Obama has proposed, to expand these centers into new areas of research and new regions of the country.

We must also do more to support emerging manufacturers as they begin to bring their product to market, especially in the scale-up phase. Experts often cite the case of flat-panel display production, where the United States lost out to foreign competition, and continues to lag behind today.

In 2013, MIT conducted a study that found many early stage U.S. manufacturers were forced to locate overseas, where foreign governments offer deep subsidies and supportive policies, to move their products from prototype to full-scale production. As a result, the critical benefits of having our nation lead a new generation of products to market were lost, and the benefits were gained by other nations.

Scaling up advanced manufacturing projects is different than many other industries. While Silicon Valley is awash in venture capitalists and other private sector funders, emerging manufacturers often do not have access to a similar capital structure. There are a number of reasons for this, but unlike building a new app, construction of a new production facility requires a big capital commitment – up to \$100 million – and the payback timeline is often up to 10 years, whereas non-manufacturing projects require less capital and have much shorter payback timelines.

Manufacturing has always been the heart of Michigan. It built the middle class and we owe it our young entrepreneurs and manufacturers to help them build their businesses here in the United States.

In 2014, the President's Advanced Manufacturing Partnership 2.0 (AMP 2.0) Committee recommended we establish a public-private partnership to provide funding to scale up manufacturing projects. A fund like this could be modeled after the successful TIFIA (Transportation Infrastructure Finance and Innovation Act) or SBIC (Small Business Investment Company) models, which combine public and private funds with a market-driven mechanism to select project recipients.

Let's join together to get this public-private partnership funded, and help these new advanced manufacturing jobs get created here in the United States, where we have the best workers in the world.

Finally, although our time is limited today, there are many other things we can do help build a strong future for manufacturing in the United States. We can strengthen our manufacturing workforce, encourage new innovative research, and modernize our tax code. I want to work with you and our colleagues on these issues as well.

In summary, as we work to build advanced manufacturing projects – such as our next generation of vehicles – it's critical for the United States to lead the world. Let's do all we can to help our next generation of manufacturers – and the hardworking folks they employ – have an opportunity to get ahead in the 21st Century. Thank you for your invitation to testify, and I welcome your questions.

Statement of Rep. Grace F. Napolitano
“Make It In America: What’s Next?” Hearing
July 9, 2015

Thank you, Whip Hoyer, for holding a hearing on this important subject, and I am pleased to be here today on behalf of the 32nd District of California and other Congressional districts much like mine. It is critical we make long awaited investments in infrastructure, in education, in small business support, and areas that do actually provide good-paying jobs. I am proud to join my many colleagues in supporting these efforts.

Middle class families and business owners across California’s San Gabriel Valley have expressed deep concerns about U.S. manufacturing losses and the urgent need to support and strengthen this sector to create good, solid paying jobs. I just last week toured several businesses in the cities of Azusa and Monrovia to communicate with and see how local manufacturing spurs job growth in our region. Our communities have been rebounding from the recession, slowly adding more jobs, but many jobs sent overseas have not come back. We must close loopholes on U.S. companies and bring jobs to our districts.

One major way to boost our manufacturing sector is to require American-made products and materials are used for infrastructure improvements. Yet, while I support always using materials made in the USA, we must be cautious of unintended consequences and protect our business sector from job losses by allowing them transition periods to comply with contracted requirements. In 2013 the U.S. Department of Transportation (USDOT) acted swiftly as the “Buy America” became law, to protect California utility companies, allowing \$5.7 billion in projects to continue without delay and preserving over 100,000 jobs that were in jeopardy.

Another way is to support local hiring provisions. In March of this year, USDOT announced a new initiative to permit local hiring for projects funded by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), correcting an outdated law that prohibited cities and local transportation agencies from hiring locally when one dollar of federal money was used or received. Now, cities with high unemployment are allowed to compete for jobs for their own residents. To ensure fairness to local taxpayers and continue to grow our local economy, we must make this 1-year pilot program a permanent law.

Last week, I joined 37 of my California Democratic colleagues sending a letter of our priorities for a long-term, well funded transportation bill. As Republicans continue to delay action on our Highway and Transit Trust Fund and reauthorizing MAP-21, our nation's infrastructure continues to crumble, threatening the safety of all who travel our roads, highways, bridges, and railways.

It is also critical that we renew the Export-Import Bank immediately. The Ex-Im Bank, Dept. of Commerce, SBA, Center for International Trade Development, and many other organizations are central for export assistance, and have been exceedingly helpful to local businesses interested in learning where to find new foreign markets for their products and help create more jobs at home. We look forward to working with these crucial agencies at our annual October export seminar.

America has to create more opportunities for people out of work and for our next generations. By making these investments that our economy and middle class need to grow, we can ensure that working families are able to prosper with 'Make It In America' for years to come.

Written Testimony of Representative Joe Courtney (CT-02)
Make It in America: What's Next?
PANEL 4: "Making It" Across the Economy

At a recent visit to the Connecticut submarine manufacturer Electric Boat in my district, U.S. Secretary of Labor Tom Perez noted that our nation is facing what he called an "Eisenhower moment." In the wake of World War II in the 1950s, President Eisenhower led a national undertaking to develop the federal highway infrastructure that grew our nation's economy and connected our country at new levels. Secretary Perez asserted that today our nation must mirror that effort to develop a "skills infrastructure" in our workforce that will help our economy grow and succeed.

In Connecticut, partners at every level have united over the last five years to develop a regional workforce strategy known as the "Eastern Connecticut Manufacturing Pipeline." Led by the Eastern Connecticut Workforce Investment Board (EWIB) and Electric Boat, along with the state Department of Labor, local community colleges and technical high schools, and many others, the Manufacturing Pipeline is equipping eastern Connecticut workers with the precise skills that employers are seeking — helping workers and their families secure good jobs, and strengthening our region's industrial base.

Electric Boat and Three Rivers and Quinebaug Valley Community Colleges in Connecticut, along with state technical high schools, have developed a customized 10-week training program aligned to the job trades in the most demand. I was proud to have been part of the effort to secure Science, Technology, Engineering and Math (STEM) strategic planning dollars, which led to the direct creation of 162 jobs and scores of additional jobs through the multiplier effect. Secretary Perez repeatedly stated that this approach should be replicated nationally.

My commitment to this invaluable effort is twofold. First, I am committed to ensuring that the Department of the Navy and Congress will continue to recapitalize our submarine and overall navy fleet through increased shipbuilding. The procurement of this work will create the demand for labor. Second, my commitment is to support local efforts partners to deliver of scalable training programs to build skill sets to fill these new shipbuilding positions in Connecticut and hundreds of their supply companies and to provide a roadmap for similar efforts around the nation.

Written Testimony of Representative Gerry Connolly (VA-11)
Make It in America: What's Next?
PANEL 4: "Making It" Across the Economy

Good afternoon, Whip Hoyer, and my colleagues. I want to thank you for hosting this hearing as we begin to outline the next chapter of the successful Make It in America agenda. I am proud to be a partner in this effort.

Thanks to your leadership, Mr. Hoyer, it is House Democrats who are advancing strategies to help employers grow their operations and create jobs. And we have had some notable successes, including the reauthorization of the America COMPETES Act, the small business Innovation Research and Technology Transfer programs, and the Workforce Innovation and Opportunity Act.

We also worked collaboratively on the last reauthorizations for the Export Import Bank and federal transportation programs, both of which are now overdue for renewal. As we consider, "what's next," for the Make It in America agenda, I suggest those two programs, which are vital to delivering American products across the country and the globe, should be atop our list.

Beyond that, we need an agenda focused on economic growth, not economic grievance. Right now, neither party is focused on what could be called the "suburban office economy" voter – the middle class Americans who work for businesses in which their own economic success is linked to that of their employer. An anti-business message won't win them over, and, in fact, it might even drive them away.

Congress has not been speaking to these individuals for some time now, and that must change.

We need an agenda that focuses on growing the high tech economy and creating clean energy jobs.

We need an agenda that assumes a global economy in which we all benefit from the free flow of goods and services.

We need an agenda that invests in our future – education, R&D, and job training.

And we need a reform agenda that rebuilds trust in government's ability to get things done and operate efficiently.

You only have to look across the Potomac to the community I represent in Northern Virginia to see the success of this approach.

We partnered with our business community to invest in a world-class school system to develop the highly skilled workforce they need to succeed in a global information economy.

We promoted a competitive tax code, and fostered not only new small business development but also international business opportunities.

We also made strategic investments in transportation -- like Metro's new Silver Line -- that served as a magnet for employers.

Today, Northern Virginia is home to a technology community rivaling that of Silicon Valley.

Those were not exactly radical ideas. In fact, they are the kinds of things that used to enjoy bipartisan support in Congress -- when responsible governing was the norm rather than the exception.

During my years in local government, we liked to say that we didn't belong to the Democratic Party or the Republican Party but to the Party of Getting Things Done. That's what people expect of their elected leaders.

Great countries achieve their success by making robust, sustainable investments in the three-legged stool of education, R&D, and infrastructure. Right now, America is disinvesting in all three! Meanwhile, our competitors -- China, India, and others -- are barreling ahead.

In 1960, we spent more than 3% of our GDP on infrastructure projects like the Interstate Highway. Today, we spend less than 1% of our GDP on these vital investments. It was just last month that the House approved a transportation appropriations bill that cut Amtrak funding by 19% the day after a tragic accident in which funding for maintenance and modernization was cited as a contributing factor. I was pleased to introduce the Build America Bonds legislation that was part of the original Make It in America agenda. We should revisit that proposal and a national infrastructure bank to not just maintain but also improve our transportation network.

Earlier this year, the House majority forced through what they called a new reauthorization of the America COMPETES Act, but their bill actually makes us less competitive. It cuts renewable energy R&D by 30%.

And this week, they again brought up an education bill that disinvests in our schools and weakens the college- and career-ready standards that will be critical to helping today's young people succeed and set the pace for the next economy.

To quote Oscar Wilde, our colleagues seem to "know the cost of everything yet the value of nothing." It's time we put forth an agenda that outlines the priorities we stand for -- not just as Democrats, but as Americans -- rather than what we are against, which is what Republicans in Congress have been focused on for the last five years.

We need an agenda that protects education and job training, invests in innovative research and basic infrastructure, and grows the economy so that our families and businesses actually can Make It in America.

Written Testimony of Representative Sean Maloney (NY-18)
Make It in America: What's Next?
PANEL 4: "Making It" Across the Economy

Thank you for inviting me to speak today –

For those of you who haven't been to my district, the Hudson Valley is a beautiful region with hundreds of small family farms lining both sides of the river.

Farming has been a key part of life in the Hudson Valley for hundreds of years. In the Black Dirt Region, it's not uncommon to see a farmer who is the 5th or 6th generation of their family to be farming the region.

In addition to help preserving the incredible beauty of the region, these farms and the fresh food they grow ensure that millions of people have access to healthy and delicious food .

But the future of the industry is uncertain - young farmers face too many obstacles today.

The average age of a farmer in the Hudson Valley is 57. In order to ensure the future viability of farming in the region, we have to act now to support the next generation of farmers so that they can thrive.

Right now, we're failing at that task. You can see it when you talk to people like Leon from Dutchess County, who told me that he and his wife want to start a farm of their own – but they're not sure how they can get the money together to buy the land.

We need to do more for people like Maddie in Putnam County, who looked at me with tears in her eyes, and told me that all she wanted to do was farm and grow delicious, fresh foods – but given her student loan debt she wasn't sure how she could ever afford to set out on her own.

Leon and Maddie are not alone - according to the National Young Farmers Coalition, 78% of farmers ranked "lack of capital" as the biggest challenge for beginning farmers.

This is unacceptable, especially when you consider the impact that farmers have on the economy. The estimated gross economic impact of farming in the Hudson Valley is close to \$1 billion each year.

There are thousands of Maddies and Leons out there, and we need to help them. Here's how we can start:

- 1) Helping young farmers access good land at affordable prices
- 2) Partner with organizations to provide beginning farmers with the training they need
- 3) Invest in developing local food infrastructure

I look forward to working with my colleagues in the House to help those like Maddie and Leon achieve their dream of owning and operating a family farm that will create a better way of life for them and their families, while growing the economy both locally and nationally.

Written Testimony of Representative Norma Torres (CA-35)
Make It in America: What's Next?
PANEL 4: "Making It" Across the Economy

Thank you Mr. Hoyer for chairing today's hearing and for continuing to stress the importance of creating good paying jobs right here at home through the Make It in America agenda. It's an honor to join you and my other colleagues here today.

I represent the Inland Empire, which in addition to manufacturing is a hub for logistics and processing. As an inland port, many of the goods that come into the Ports of LA and Long Beach go through my district before being shipped to the rest of the country.

Unfortunately however, my district was also among the hardest hit by the recession. While we're certainly on the rebound, many of the jobs that have come back are lower wage, lower skill, and part-time.

They're not the kinds of jobs you can raise a family on.

Job creation remains at the forefront of my constituents' concerns.

This why I spent my first few months in office on a Jobs Listening Tour of my district, meeting with local economic leaders, education professionals, employees, and owners of businesses large and small. I wanted to hear straight from them what they thought we should do to bring jobs to our region.

My findings from this tour and recommendations were detailed in a report that can be found on my website, but I can tell you that at every meeting we held, two issues always came up, better infrastructure and improved workforce development.

The quick and cost efficient transport of goods requires safe and modern roads, bridges, and railways, and you can't connect people to employment centers without expanding public transit.

This requires significant, long-term investment in our nation's infrastructure, yet we're facing a \$3.6 trillion funding shortfall over the next five years and are relying on short-term, stop-gap transportation authorization bills.

There's no question Congress must do its job and pass a long-term Highway Trust Fund authorization, but we also have to look at new, innovative strategies to fill the gap.

The first bill I introduced after the listening tour, the Regional Infrastructure Accelerator Act would help us do just that.

Through the creation of multi-state organizations or Regional Infrastructure Accelerators, my bill will connect finance and infrastructure professionals with local and state governments to provide them with the technical expertise and pre-development capital needed to attract private investment to public infrastructure projects.

But even if we create jobs in the U.S. and build the infrastructure to support them, we need to make sure that American workers are trained to fill them.

The Job Opportunities between Our Shores Act, or JOBS Act, which also came out of what I heard during my listening tour, will connect educational institutions with manufacturers to train jobseekers in the skills employers demand.

There is already one such program at work in my district with the partnership between California Steel Industries and Chaffey College.

This is a model we should grow and build upon as manufacturing jobs in the Inland Empire and across the country are bouncing back.

If the recession has taught us anything it is that in order to build a resilient economy that can withstand future economic challenges, we need a dynamic, educated workforce and a diverse local economy.

Comprehensive, demand-driven educational programs like those proposed in the JOBS Act will help quickly train unemployed and displaced workers to meet the needs of a changing economy.

The global economy is only getting more competitive. We can't afford to take a backseat and hope things work out for the best. Congress needs to step up and take action to spur job growth right here at home.

Finding innovative ways to train American workers, both in high-tech manufacturing as well as other growing fields, and to fund our nation's infrastructure are a start and should form part of the Make It in America agenda.

I look forward to continuing to work with all of you to create the 21st century jobs our constituents deserve.

Thank you once again for keeping the spotlight on these issues. I hope our colleagues will follow suit.